WHAT IS CLAIMED IS:

1. A method for determining the presence of neoplastic molecular markers in a host comprising:

a) obtaining a test sample from the host;

b) identifying the presence of neoplastic molecular markers in the test sample using an array of neoplastic molecular marker specific reagents; and

c) analyzing the array of neoplastic disease molecular marker specific reagents, wherein the analysis yields the identification of a neoplastic disease from which the neoplastic molecular markers originate.

2. The method of Claim 1, wherein the neoplastic disease is lung cancer.

3. The method of Claim 1, wherein the neoplastic disease is prostate cancer.

4. The method of Claim 1, wherein the neoplastic disease is astrocytoma.

5. The method of Claim 1, wherein the neoplastic disease is neuroblastoma.

6. The method of Claim 1, wherein the array of neoplastic molecular marker specific reagents is used in an immunological assay method.

7. The method of Claim 4, wherein the immunological assay method is selected from the group consisting of dot blot analysis, slot blot analysis, and ELISA.

8. The method of Claim 1, wherein the expression pattern of the array of neoplastic molecular markers is determined by evaluating the quantity of RNA or DNA encoding said markers.

9. The method of Claim 8, wherein the quantity of RNA or DNA is determined by a method selected from the group consisting of Northern blot analysis, Southern blot analysis, Western blot analysis, RT-PCR, PCR, nucleic acid sequence based amplification assays (NASBA), transcription mediated amplification (TMA), or computerized detection matrix.

10. An array for identifying a neoplastic source sample, comprising a plurality of neoplastic molecular markers arranged in an assayable format, said molecular markers being differentially expressed as compared to a comparable non-neoplastic source sample.

11. The array of Claim 10, wherein the array comprises neoplastic molecular marker specific reagents to detect the presence of a small cell lung cancer.

12. The array of Claim 8, wherein the reagents comprise reagents specific for the detection of NeuroD2, ATH5, Sox1, Sox2, and LMO4

13. The array of Claim 10, wherein the array comprises of neoplastic molecular marker specific reagents to detect the presence of a non-small cell lung cancer.

14. The array of Claim 13, wherein the reagents comprise reagents specific for the detection of Groucho1, SOX2, SOX3 and NKX5.2.

15. The array of Claim 13, wherein the reagents comprise reagents specific for the detection of Zic family members.

16. The array of Claim 15, wherein the reagents comprise reagents specific for the detection of MyT-2, Hes-5, and SMAD6.

17. The array of Claim 10, wherein the reagents comprise reagents specific for the detection of neuronal genes are selected from the group consisting of Neurogenin-1/MATH4c, Neurogenin-2/MATH4a, Neurogenin-3/MATH4b, Emx-1, Emx-2, Isl1, Lhx2, Lhx3, Lhx4, Lhx5, Lhx6, Lhx7, Lhx9, LMO1, LMO2, LMO4, HES1, HES2, HES3, HES4, HES5, HES6, HES7, or combinations thereof.

18. The array of Claim 10, wherein the reagents comprise reagents specific for HES1, HES2, HES3, HES4, HES5, HES6, HES7, SMAD1, SMAD2, SMAD3, SMAD4, SAMD5, SMAD6, SMAD7, SMAD8, SMAD9, SMAD10, or combinations thereof.

19. The array of Claim 10, wherein the reagents comprise reagents specific for HES1, HES2, HES3, HES4, HES5, HES6, HES7, Emx-1, Emx-2, Isl1, Lhx2, Lhx3, Lhx4, Lhx5, Lhx6, Lhx7, Lhx9, NeuroD 1, NeuroD 2, NeuroD 3, ASH-1/MASH1, ASH-2/MASH2, ASCL-3/reserved, or combinations thereof.

20. The array of Claim 10, wherein the array comprises neoplastic molecular marker specific reagents indicative of a prostate cancer.

21. The array of Claim 20, wherein the neoplastic molecular marker specific reagents are indicative of prostate cancer of Group I.

22. The array of Claim 21, wherein the reagents comprise reagents specific for the detection of NeuroD2, ATH1, Isl1, LMO4, and GBX2.

23. The array of Claim 20, wherein the neoplastic molecular marker specific reagents are indicative of prostate cancer of Group II.

24. The array of Claim 23, wherein the reagents comprise reagents specific for the detection of Nkx2.2, Sall1, and Sharp1.

25. The array of Claim 10, wherein the array comprises neoplastic molecular marker specific reagents are indicative of an astrocytoma.

26. The array of Claim 25, wherein the neoplastic molecular marker specific reagents are indicative of a subclass I astrocytoma.

27. The array of Claim 26, wherein the reagents comprise reagents specific for the detection of negative regulators of neural differentiation markers and neuronal genes.

28. The array of Claim 27, wherein the negative regulators of neural differentiation markers are selected from the group consisting of Msx-1, Msx-2, or combinations thereof.

29. The array of Claim 27, wherein the neuronal genes are selected from the group consisting of Neurogenin-1/MATH4c, Neurogenin-2/MATH4a, Neurogenin-3/MATH4b, Emx-1, Emx-2, Isl1, Lhx2, Lhx3, Lhx4, Lhx5, Lhx6, Lhx7, Lhx9, LMO1, LMO2, LMO4, HES1, HES2, HES3, HES4, HES5, HES6, HES7, or combinations thereof.

30. The array of Claim 26, wherein the reagents comprise reagents specific for HES1, HES2, HES3, HES4, HES5, HES6, HES7, SMAD1, SMAD2, SMAD3, SMAD4, SAMD5, SMAD6, SMAD7, SMAD8, SMAD9, SMAD10, or combinations thereof.

31. The array of Claim 26, wherein the array comprises high expression of HES genes and neural genes of Neurogenin, NeuroD and ASH family.

32. The array of Claim 26, wherein the reagents comprise reagents specific for HES1, HES2, HES3, HES4, HES5, HES6, HES7, Emx-1, Emx-2, Isl1, Lhx2, Lhx3, Lhx4, Lhx5, Lhx6, Lhx7, Lhx9, NeuroD 1, NeuroD 2, NeuroD 3, ASH-1/MASH1, ASH-2/MASH2, ASCL-3/reserved, or combinations thereof.

33. A method of identifying a treatment for a patient having neoplastic disease comprising

determining the presence of neoplastic molecular markers in the patient according to the method of Claim 1; and

selecting a therapeutic protocol based upon a correlation between particular therapeutic regimes and the particular markers identified in the determining step.

34. The method of Claim 33, wherein the presence of one or more neoplastic molecular markers is determined using an immunological assay method.

35. The method of Claim 34, wherein the immunological assay method is selected from the group consisting of dot blot analysis, slot blot analysis, RIA, peptide microarray, and ELISA.

36. The method of Claim 33, wherein the presence of one or more neoplastic molecular markers is determined using a molecular biological-based assay methods.

37. The method of Claim 36, wherein the molecular biological-based assay method is selected from the group consisting of Northern blot analysis, Southern blot analysis, Western blot analysis, RT-PCR, PCR, nucleic acid sequence based amplification assays (NASBA), transcription mediated amplification (TMA), or computerized detection matrix.

38. The method of Claim 33, wherein the neoplastic molecular markers present are indicative of a small cell lung cancer.

39. The method of Claim 38, wherein the presence of negative regulators of neural differentiation markers is detected and the presence of neuronal genes is not detected.

40. The method of Claim 38, wherein the neoplastic molecular markers present are indicative of a small cell lung cancer comprise NeuroD2, ATH5, Sox1, Sox2, and LMO4

41. The method of Claim 33, wherein the neoplastic molecular markers present are indicative of a non-small cell lung cancer.

42. The method of Claim 41, wherein the presence of negative regulators of neural differentiation markers is detected and the presence of neuronal genes is not detected.

43. The method of Claim 41, wherein the neoplastic molecular markers present are indicative of a non-small cell lung cancer comprise Groucho1, SOX2, SOX3 and NKX5.2.

44. The method of Claim 33, wherein the neoplastic molecular markers present are indicative of a prostate cancer.

45. The method of Claim 44, wherein the presence of negative regulators of neural differentiation markers is detected and the presence of neuronal genes is not detected.

46. The method of Claim 44, wherein the prostate cancer is that of Group I.

47. The method of Claim 46, wherein the neoplastic molecular markers indicative of prostate cancer of Group I comprise NeuroD2, ATH1, Isl1, LMO4, and GBX2.

48. The method of Claim 44, wherein the neoplastic molecular markers indicative of prostate cancer of Group II.

49. The method of Claim 48, wherein the neoplastic molecular markers indicative of prostate cancer of Group II comprise Nkx2.2, Sall1, and Sharp1.

50. The method of Claim 33, wherein the neoplastic molecular markers present are indicative of an astrocytoma.

51. The method of Claim 50, wherein the astrocytoma is a subclass I astrocytoma.

52. The method of Claim 51, wherein the presence of negative regulators of neural differentiation markers is detected and the presence of neuronal genes is not detected.

53. The method of Claim 52, wherein the negative regulators of neural differentiation markers are selected from the group consisting of Msx-1, Msx-2, or combinations thereof.

54. The method of Claim 52, wherein the neuronal genes not detected are selected from the group consisting of Neurogenin-1/MATH4c, Neurogenin-2/MATH4a, Neurogenin-3/MATH4b, Emx-1, Emx-2, Isl1, Lhx2, Lhx3, Lhx4, Lhx5, Lhx6, Lhx7, Lhx9, LMO1, LMO2, LMO4, or combinations thereof.

55. The method of Claim 52, wherein the negative regulators of neural differentiation markers are selected from the group consisting of SMAD1, SMAD2, SMAD3, SMAD4, SAMD5, SMAD6, SMAD7, SMAD8, SMAD9, SMAD10, or combinations thereof.

56. The method of Claim 55, wherein the neuronal genes are selected from the group consisting of NeuroD 1, NeuroD 2, NeuroD 3, ASH-1/MASH1, ASH-2/MASH2, ASCL-3/reserved, or combinations thereof.

57. The method of Claim 52, wherein the negative regulators of neural differentiation markers are selected from the group consisting of HES1, HES2, HES3, HES4, HES5, HES6, HES7, or combinations thereof.

58. The method of Claim 57, wherein the neuronal genes are selected from the group consisting of NeuroD 1, NeuroD 2, NeuroD 3, ASH-1/MASH1, ASH-2/MASH2, ASCL-3/reserved, or combinations thereof.

59. The method of Claim 52, wherein the negative regulators of neural differentiation are selected from the group consisting of HES1, HES2, HES3, HES4, HES5, HES6, HES7, and the neuronal genes are selected from the group consisting of Emx-1, Emx-2, Isl1, Lhx2, Lhx3, Lhx4, Lhx5, Lhx6, Lhx7, Lhx9, or combinations thereof.

60. The method of Claim 59, wherein the neuronal genes are selected from the group consistin of NeuroD 1, NeuroD 2, NeuroD 3, ASH-1/MASH1, ASH-2/MASH2, ASCL-3/reserved, or combinations thereof.

61. The method of Claim 33, wherein the neoplastic molecular markers present are indicative of a neuroblastoma.

62. The method of Claim 61, wherein the neoplastic molecular markers present are indicative of the neuroblastoma comprise SMAD1, SMAD2, SMAD3, SMAD4, SMAD5, SMAD6, SMAD7, SMAD8, SMAD9, SMAD10, SHH, Notch1, Notch2, Notch3, Notch4, and TAN-1.

63. The method of Claim 61, wherein the neoplastic molecular markers present are indicative of the neuroblastoma comprise ASH-1 and Neurogenin1.

64. The method of Claim 61, wherein the neoplastic molecular markers present are indicative of the neuroblastoma comprise Hes5, Hey1, NeuroD1, NeuroD2, and NeuroD3.

65. A method of treating a neoplastic disease comprising:

providing an assay sample isolated from a subject suspected of having a neoplasm;

determining the presence of one or more neoplastic molecular markers in the sample;

identifying the neoplastic disease from the presence of neoplastic molecular markers determined; and

selecting a therapeutic protocol based upon a correlation between particular therapeutic regimes and particular neoplastic disease states.

66. The method of Claim 65, wherein the therapeutic regime comprises administering cytokines.